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Comments by Verenium Corporation, regarding the Notice of Proposed Rulemaking regarding the Loan Guarantee Program of the U.S. Department of Energy authorized by Title XVII of the Energy Policy Act of 2005

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RE: RIN 1901-AB21

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Verenium Corporation is pleased to submit the following comments regarding the policies and procedures proposed by the U.S. Department of Energy to be applicable to DOE's loan guarantee program authorized by Title XVII of the Energy Policy Act of 2005, as published in the Notice of Proposed Rulemaking published May 16, 2007 (the "NOPR"). Verenium is a leading developer of cellulosic ethanol technology and projects. We[1] have been developing our core technology for over ten years, and we have submitted two Pre-Applications under the Guidelines published on August 14, 2006, for the first solicitation under the Title XVII loan guarantee program. Our website is www.verenium.com.

These comments represent the experience of Verenium's executives and advisors, who have successfully structured many nonrecourse financings of energy projects, totaling several billion dollars, as well as discussions with experienced energy project lenders.

Terms defined in the NOPR will be used as defined therein.

Verenium believes that Title XVII loan guarantees can be extremely important in the commercialization of new and improved technologies for the purpose of furthering the objectives of the Act and the President's Advanced Energy Initiative in general and

[1] Verenium Corporation is the result of the merger on June 20, 2007, of Diversa Corporation and Celunol Corp. The cellulosic technology development referred to has been done, and the loan guarantee Pre-Applications referred to were submitted, by Celunol Corp. (previously known as BC International Corporation). Oral comments were provided on June 15, 2007, by John McCarthy, Verenium's EVP and CFO, prior to the merger, in his role as EVP and CFO of Celunol Corp.

reducing air pollutants, anthropogenic greenhouse gases and America's reliance on imported oil in particular. We welcome this opportunity to make suggestions as to how the loan guarantee program may be improved to achieve its intended purposes.

A. General Comments

1. The Importance of Loan Guarantees. Among other things, the Federal government is providing both grants and loan guarantees for new energy technologies. While grants are useful for research and development, loan guarantees are particularly important for the construction of commercial-scale installations using new technologies. A single early-stage commercial-scale cellulosic ethanol plant, for example, can easily cost more than $100 million. The federal government is simply unable to make outright grants on the scale required for commercialization of all these important technologies. However, by offering assistance in the form of loan guarantees, the government can effectively leverage its contribution and support several innovative technologies.

Loan guarantees are especially important to accomplishing our energy security objectives, because the value of new technologies is limited unless commercial facilities can be deployed and because finding commercial debt financing for the first commercial-scale installations of new technologies is, at best, extremely difficult and is sometimes impossible. Many non-recourse lenders simply refuse to make loans at all to projects with new technologies. Those who will consider such loans typically require creditworthy third parties to stand behind the performance of the new technology.

2. Allocation of Risk. Risk allocation is a fundamental task in all project financings and is a critical feature for DOE to consider in structuring a loan guarantee program designed to support technologies that, being unproven, are inherently risky.

The ideal credit structure allocates a risk to the party best able to manage it at the lowest cost. The typical candidates for protecting lenders from the risks of a new technology are the sponsor of the technology, engineering and construction contractors, and the loan guarantor (in this case, the government).

a. Although the sponsor of a new technology may be willing to provide performance guarantees, many of such sponsors do not have the deep financial resources necessary to make their guarantees financeable.

b. Thus the engineering and construction company acting as general contractor (the "**EPC contractor**") is often called upon to provide such guarantees, along with the fixed price and guaranteed schedule that are necessary for non-recourse financings. This is customary for such financings of established technologies. But it is unrealistic to expect a contractor to stand behind a technology developed by someone else. This is particularly true if the technology involves biochemical processes, which are outside the expertise of most engineering and construction firms. Verenium has experienced precisely this problem in creating credit structures for our proposed cellulosic ethanol projects.

c. It is because of the difficulty of each of these items that governmental loan guarantees can be especially important—to help establish a foothold for innovative technologies that are in the public interest but that might not otherwise be able to be financed.

B. The Structure of the Loan Guarantee Program

The primary purpose of the loan guarantee program is to support innovative technologies. As stated in the Act and the NOPR, the primary purpose of the Title XVII loan guarantee program is to support projects using or employing "new or significantly improved technologies"—i.e., technologies that, among other things, "have not been proven in commercial projects in the United States and therefore may present significant risks."

Certain aspects of the proposed structure work against the achievement of these objectives, and we would like to suggest some structural changes in the loan guarantee program that would enhance the effectiveness of the program in accomplishing its objectives.

We note that the Act requires that there be a reasonable prospect of repayment of principal and interest on a guaranteed loan, and our suggestions are intended to support that requirement.

1. The Problems with Subordination and the No-Stripping Rule

The NOPR proposes that a Title XVII loan guarantee be limited to no more than 90 percent of the total face value of the loan(s) or other debt obligation(s), that the guaranteed and non-guaranteed portions of a loan or debt obligation not be permitted to be sold separately from each other, and that the government have a superior lien position to all other lenders. While this last point derives from the Act,[2] the first two points—a 90% guarantee limitation and no-stripping—are not required by the Act.

While aiming to serve important purposes, this combination of a less-than-100% guarantee, subordination of the non-guaranteed debt and no stripping undermines the

[2] Although §609.10(d)(13) of the proposed regulations does not specify that the Guaranteed Obligation cannot share its first lien position with non-guaranteed lenders, we take note of Section 1702(g)(2)(B) of the Act, which provides that the rights of the Secretary shall be "superior" to the rights of any other person with respect to collateral, so that holders of non-guaranteed loans are subordinated to DOE.

purpose of the loan guarantee, makes it more difficult for lenders to participate in the loan guarantee program, and does not fit the realities of the debt markets.

a. Guaranteeing less than 100% of the loan requires lenders to be exposed to full technology risk for a portion of their loan. This requirement undermines a fundamental premise of the loan guarantee program, i.e., that commercial lenders are generally unwilling to take technology risk.

b. One way to deal with this problem would be for DOE to require the same credit structure that commercial lenders would require if they were willing to consider financing projects with technology risk—i.e., technology performance guarantees from EPC contractors or other parties. But as noted above, it is hard to expect a contractor to stand behind a technology developed by someone else. This is particularly true if the technology involves biochemical processes that are outside the expertise of most engineering and construction firms. So this is not a realistic solution.

c. Nonetheless, it might be possible to find a lender willing to make a small non-guaranteed loan for a new technology. But the subordination and no-stripping requirements make it even less likely that this will occur.

d. The purpose of the loan guarantee is to make it easier for the early commercial installations of new technologies to be financed, but the subordination of non-guaranteed debt creates an anomaly by actually <u>increasing</u> the risk taken by the non-guaranteed lenders and requiring non-guaranteed lenders to take a "first-loss" position, in which the non-guaranteed lenders may suffer a <u>full</u> loss before DOE suffers <u>any</u> loss.

e. We recognize that the subordination requirement is in the Act, so that if a loan guarantee is less than 100%, subordination will follow. And there is a class of lenders that seeks high-risk, high-return loans. These are often referred to as "subordinated" or "mezzanine" lenders. There may be some such lenders who, for the right return (which will be extremely high), will take such risks. But those lenders are very different from lenders who seek low-risk securities such as the guaranteed loans.

   The flaw in the no-stripping rule—which is not required by the Act—is thus that it does not fit the realities of the debt markets. If the guaranteed debt could be stripped, the loans could be marketed to separate groups of lenders: those who seek low-risk securities (the guaranteed portion) and those who seek high yields and are willing to accept very high risks (the subordinated, non-guaranteed portion), when they can be found. But it is extremely difficult to find lenders who are interested in holding <u>both</u> types of securities.

f. In other circumstances it might be possible for a Project Sponsor itself to provide the subordinated debt, effectively increasing the amount of project equity and reducing the debt-equity ratio. But the no-stripping rule precludes that solution, by requiring the holder of non-guaranteed debt to hold a proportionate amount of guaranteed debt.

Proposed Solutions for the Subordination and No-Stripping Problems

a. The best solution would be for DOE to guarantee 100% of the project debt constituting 80% of Project Costs. This would eliminate both the subordination and no-stripping problems, because there would be no non-guaranteed debt. This change would be consistent with Section 1702(c) of the Act, which permits loan guarantees of up to 80% of the project cost.

   In the FAQ for the Guidelines, the stated reasons for a guarantee of less than 100% of the debt are that the DOE wants to limit the financial exposure of the Federal government and to rely upon the non-guaranteed lenders to monitor the debt in order to ensure full payment of principal and interest.

   These reasons can be addressed as follows.

   i. Although a 100% loan guarantee would certainly expose the Federal government to more risk than a 90% guarantee, the public purpose of promoting new technologies is better served by a 100% loan guarantee (80% of Project Costs) that is effective than by an 90% loan guarantee (72% of Project Costs) that is ineffective because the non-guaranteed portion is unacceptable to potential project lenders.

   ii. Although the Credit Subsidy Cost and administrative fees for a 100% loan guarantee would certainly be higher than those for a 90% guarantee, the incremental cost would either (i) be paid by the Project Sponsor and thus require DOE to incur no additional net expenses or (ii) be fully justified because of the benefit accruing to a more effective loan guarantee program.

   iii. We acknowledge that if the guarantee covers the full amount of the loan, the government will not be able to rely on the holders of the debt to monitor the project, because the primary focus of holders of guaranteed debt will be on the creditworthiness of the guarantor rather than that of the borrower. So it would be necessary and appropriate for the government to engage specific staff and consultants to monitor the project's performance, at the project's expense. Expert professionals are available to perform these functions, and DOE can engage them just as commercial lenders do in commercial project finance transactions.

b. If DOE is concerned about the increased cost of a 100% guarantee of an 80% loan, it should consider the following alternative: Rather than a 90% guarantee of an 80% loan (i.e., a guarantee of debt equal to 72% of Project Costs), it could issue a loan guarantee for 100% of a 72% loan. DOE's credit exposure would be the same, but the subordination and no-stripping requirements would not provide structural problems. This is not an ideal solution, of course, because the Project Sponsor would still have to find difficult subordinated/mezzanine debt or provide additional project equity.

c. Another alternative solution is to permit the non-guaranteed loan to be repaid on a shorter amortization schedule than the guaranteed loan. One of the benefits of the loan guarantee is the availability of a repayment period up to 90% of the useful life of the project (but not longer than 30 years). Different markets are comfortable with different maturities. Commercial banks are generally the institutions most suited to project financings, but they do not often make loans with long maturities, even for corporate lenders with strong credit ratings. It would enhance the ability of projects to attract non-guaranteed lenders if the non-guaranteed debt amortization could be set up on a different schedule.

   Once the non-guaranteed debt has been repaid, DOE would be required to monitor the loan itself (using expert professionals, as discussed above), but DOE would be able to take advantage of participation by non-guaranteed lenders and their consultants as long as they were involved.

d. Another alternative solution is simply to permit stripping of the non-guaranteed debt from the guaranteed debt. This would allow (i) the Project Sponsor to seek subordinated or mezzanine lenders without requiring them to purchase guaranteed loans or (ii) the Eligible Lender to syndicate the guaranteed and non-guaranteed portions separately, and both would be consistent with public policy. The no-stripping provision is not required by the Act or by all Federal loan guarantee programs. For example, the Business and Industrial Program of the U.S. Department of Agriculture specifically contemplates stripping.

   The reasons given for the no-stripping rule are (x) to avoid competition between the guaranteed debt and other Federal debt instruments and (y) "to ensure that the Eligible Lender and any subsequent holder of the debt instrument maintain the financial risk in the project that was deemed appropriate when the guarantee was issued so as to ensure continued performance of the due diligence required by the loan documents and the best efforts of the holder to ensure full repayment of the principal and interest of the debt instrument."[3]

Regarding reason (x): The current volume of government-guaranteed securities is so vast that these guaranteed loans should not have a discernible impact on interest rates or other market measures, and in any case, the effect is justified by the public purpose underlying the loan guarantees.

Regarding reason (y):

i. If a guaranteed loan is stripped from a non-guaranteed loan, the party buying or retaining the non-guaranteed loan will actually be going beyond the financial risk when the guarantee was issued by taking on greater financial risk than it would have with both guaranteed and non-guaranteed loans.

ii. As discussed above, DOE is capable of engaging expert professionals to assist it in monitoring guaranteed loans, just as commercial lenders do, so it is not necessary to have non-guaranteed debt at all for this purpose.

iii. If non-guaranteed debt is required, the no-stripping rule is not necessary to motivate non-guaranteed lenders. Whether or not the non-guaranteed loan is stripped, the holders of non-guaranteed debt will monitor the project's performance carefully for the life of their loan. Their motivation to watch over the project will not be reduced if they do not also hold guaranteed loans. In fact, one might argue that their motivation would be enhanced because they have greater risk than someone holding both guaranteed and non-guaranteed loans.

e. An alternative that is not currently permitted under the Act (but that should be considered if future legislation permits) is to permit the non-guaranteed loan to have the first lien on any project collateral ahead of DOE. This would put DOE in the first-loss position, so that its exposure would be slightly greater than in the proposed rule, but this structure would be thoroughly consistent with the public policy being promoted by the loan guarantee program. It would, in fact, reverse the anomaly discussed above—that the loan guarantee program is intended to make financing new technologies easier but the proposed structure actually requires commercial lenders to take more risk.

[3] FAQs for Guidelines, item 8.

Specific Suggested Language Changes

a. In §609.10(d)(3), substitute "100%" for "90%".

b. Delete §609.10(d)(4) in order to permit stripping.

2. Reasonable Prospect of Repayment; Credit Rating

The requirement of the Act that there be a "reasonable prospect of prepayment of the principal and interest" on guaranteed debt obligations leads DOE to make repayment of debt a "very high priority," but it does not implicitly or explicitly require that the credit standards applied to projects be the same as the credit standards applied by commercial lenders. There are very good reasons why the credit standards applied by DOE should be different from those used by commercial lenders, and they underlie the very purpose of the loan guarantee program.

The purpose of the loan guarantee program is to enable the successful commercialization of these technologies. That is measure by which DOE will be judged. Of course, the Department wants the guaranteed loans to be repaid. While this is a constraint, it is not the purpose of the program. Let us offer an analogy: If the hospital bill is paid but the patient dies, that is not judged a successful outcome.

This does not mean that DOE should not apply appropriate credit standards; it means that its approach should be different from that of commercial lenders.

a. As discussed above, when commercial lenders are willing to finance a not-yet-commercial technology at all, they typically look for a third party to guarantee the performance of the technology. But third-party guarantees are very hard to come by. It is the difficulty of arranging such financings that has led to this loan guarantee program.

b. The first instances of a new technology are not likely to be fully competitive with more mature technologies. The Advanced Energy Initiative acknowledges this point by having one of its goals be "to make cellulosic ethanol cost-competitive with corn-based ethanol." This goal implicitly acknowledges that the projects benefiting from these loan guarantees are not yet fully competitive (although as technologies are improved and costs are reduced, they should become more competitive).

c. If there were no risks to new and innovative technologies, there should be no difficulty in finding commercial financing. Thus DOE should acknowledge that it intends to take risks that commercial lenders would not take and should not look to contracts with third parties to protect itself from all those risks.

d. Similarly, the government should not require the credit quality of the project to be the same as that of a grain-based ethanol project with fully mature technology and a fully mature capital and operating cost structure. Although one of the evaluation criteria for a Title XVII loan guarantee is whether the technology "is ready to be employed commercially in the United States," there is a difference between an innovative technology's being commercial and its being fully competitive.

This does not mean that DOE should stand behind any technology without careful review or that risks should not be addressed. For example:

i. DOE should apply typical commercial standards for the elements of a project that do not involve new or innovative technologies.

ii. DOE should evaluate the degree to which a technology is ready to be employed commercially. The NOPR appropriately proposes that research, development and demonstration projects not be eligible for loan guarantees because they are not "mature enough to assure dependable commercial operations" (p. 10). This should also inform DOE's selection criteria for loan guarantees. That is, a technology that has systematically advanced under laboratory, pilot and demonstration facilities is more likely to be ready to be employed commercially than a technology that has not advanced through different scale-up stages. DOE's attention to this approach is indicated by the presence of § 609.4(c)(2)(i) of the proposed regulations, which calls for Pre-Applications to identify successes and failures during pilot and demonstration phases. For loan guarantee solicitations that do not include Pre-Applications, the Application should include such information.

iii. DOE should engage appropriate technical advisors to review the readiness of the technology for commercial activity. For example, such advisors should review the research, development, pilot and demonstration activities undertaken by the sponsor and assess the degree of scale-up risk inherent in the proposed project. It is appropriate for the government to assure itself that the relevant testing has been done to support a commercial-scale project.

This should not, however, require a credit assessment by a rating agency, as set forth in § 609.6(b)(21) and § 609.9(f) of the proposed regulations. It is not clear why this requirement is included. A credit rating is typically used by lenders and debt investors to evaluate project risks for a variety of reasons: to determine the appropriate pricing for a debt instrument, to evaluate the overall risk of a debt portfolio, and to measure projects against the lender's/investor's own risk threshold—i.e., whether the lender/investor is willing to accept the risk at any price. But credit agency ratings are not typically used by project lenders to help them structure transactions.

Our concern is partly to eliminate the unnecessary time and expense of procuring a credit rating and partly that DOE may use a low credit rating to decide that a project is too risky for a loan guarantee. For example, a standard corn ethanol plant, with mature technology, will typically be rated single-B—a low, sub-investment grade rating. If you add the technology risk of a new cellulosic ethanol technology, the rating is likely to be even lower. But, as stated above, the very purpose of the loan guarantee program is to support risky projects.

3. New or Significantly Improved Technologies

The NOPR requests comments on DOE's proposed definition of "new or significantly improved technologies," as used in section 1703(a)(2) of the Act. The proposed definition has two parts, with the second part having two alternative subparts.

Part 1: DOE proposes to limit loan guarantees to technologies "concerned with the production, consumption or transportation of energy." This is appropriate.

Part 2: DOE proposes to limit loan guarantees to technologies that either have "only recently been discovered or learned" or "involve or constitute meaningful and important improvements in the productivity or value of the technology." We believe that this part of the definition can be improved.

a. It is entirely possible that a technology has been in existence for some time—and would thus not qualify as "recent"—but has never been commercially applied, for one reason or another. One example could be a technology that was not expected to be commercially viable when competing with $20/bbl oil but that may be quite competitive at $60/bbl oil. Such a technology may have waited for many years before attracting the capital required to fully develop it, so it may not be "recently" discovered or learned, but it may be quite appropriate for a loan guarantee. Another example is fuel cells: The principle of fuel cells dates from the 1850s, but the prospect of widespread commercialization has only arisen within the past decade. We believe that DOE's focus on technologies not yet in general use is a better way to identify technologies deserving of loan guarantees. Thus, we suggest that the definition of "New or Significantly Improved Technology" refer to the defined term "Commercial Technology."

   Thus we suggest that the definition of "New or Significantly Improved Technology" be amended to read as follows:

"*New or Significantly Improved Technology* means a technology concerned with the production, consumption or transportation of energy and that ~~has either only recently been discovered or learned~~ is not a Commercial Technology or that involves or constitutes one or more meaningful and important improvements in the productivity or value of a Commercial Technology ~~the technology~~."

b. Regarding the second clause of part 2: DOE should explicitly state that a loan guarantee may be available to the same party for both (a) a new technology and (b) an improvement in the same technology, which could qualify it for a separate loan guarantee.

Thus we suggest that § 609.7(b)(3) be amended to read as follows:

"(3) To the extent that the new or significantly improved technology used in the project constitutes an important improvement in technology used to avoid, reduce or sequester air pollutants or anthropogenic emissions of greenhouse gases, and the Applicant has a plan to advance, or assist in the advancement, of that technology into the commercial marketplace; it shall not disqualify an Applicant from receiving a loan guarantee for a technology if it or another Applicant has previously received a loan guarantee for a different version of the same technology, as long as the proposed version of the technology constitutes a New or Significantly Improved Technology;".

4. Commercial Technology

The NOPR requests comment on its proposals for the definition of "Commercial Technology." We infer that the proposals in the NOPR are aimed at providing bright-line rules to carry out the definition in Section 1701(1)(A) of the Act, i.e., that "commercial technology" means "a technology in general use in the commercial marketplace."

The NOPR's alternative proposals for a technology in general use are: (a) that it "has been ordered for, installed in, or used in five or more projects in the United States," and (b) that it "has been in operation in a commercial project in the United States for a period of five years, as measured beginning on the date the technology was commission[ed] on a project." We believe that alternative (a), with adjustments, is more likely to achieve DOE's objectives, as follows.

Regarding alternative (b): If, over a five-year period, a technology has been used in at least one but fewer than five projects, the NOPR proposes that it nonetheless be considered to be in general use. We suggest that the opposite is likely to be true, and that in this situation the technology is probably not in general use.

If a technology manages to attract financing for one commercial project but not more, that fact suggests that there is some barrier to competitiveness, and a loan guarantee might be appropriate.

Thus we believe that alternative (a) will be more likely to achieve DOE's objectives. We have the following suggestions regarding alternative (a):

a. Five projects is a useful guideline, but there may be occasions on which DOE determines that although there are five commercial projects using a technology, it nonetheless should not be considered to be in "general use." There may be technologies that offer compelling advantages, such as reduced greenhouse gas emissions, that are already in use in more than five instances, but that are still at the stage of development where the technology's cost structure is not directly cost-competitive with conventional technologies that do not offer such benefits. In such an example, we believe there could still be a strong public policy rationale for continued loan guarantees for such a technology. So we recommend that while the Department may state a definition of "commercial technology," it should not lock itself out of the ability to be flexible.

   Conversely, DOE might determine that although a technology has fewer than five commercial installations, it has achieved "general use," so a loan guarantee would not be appropriate.

   So we suggest that this be stated as only a presumption, so that DOE would have the flexibility to deviate from the presumption in appropriate circumstances.

b. The reference to five projects should specify "commercial" projects, to make it clear that demonstration projects are not counted. This is consistent with the first sentence of the definition of "Commercial Technology."

c. When measuring five projects, "ordered for" can be ambiguous. If a project has been financed and is in construction, it is appropriate to count it toward the total of five, because the likelihood of commercial operation is high. But if a technology is "ordered" and the project has not yet been financed, there is no assurance that construction will proceed or that the technology will enter commercial operation. Thus we suggest the use of "in the process of being installed" instead of "ordered for."

d. On page 14, the NOPR proposes that a technology in general use outside the United States would be eligible for a Title XVII loan guarantee. However, if a technology is in general use outside the U.S., there is a strong probability that it can gain financing on commercially reasonable terms for projects within the U.S., in which case a loan guarantee would be unnecessary, and the regulations should permit DOE to take that fact into account. Our suggestion to make this a "presumption" would give DOE that ability.

Thus we suggest the following amended language for the definition of "Commercial Technology":

> "*Commercial Technology* means a technology in general use in the commercial marketplace in the United States, but does not include a technology solely by use of such technology in a demonstration project funded by DOE. A technology is <u>presumed to be</u> in general use if it has been ~~ordered for,~~ installed in or used <u>or is in the process of being installed</u> in five commercial projects in the United States."

5. <u>Payment of the Credit Subsidy Cost</u>

The government should not charge the borrower the full cost of providing a loan guarantee.

For this purpose, the government is different from a commercial loan guarantor (such as a monoline insurance company providing bond insurance), which charges a premium to a borrower. A commercial loan guarantor typically enables a borrower to achieve more attractive financing terms (such as a lower interest rate), and the premium represents a portion of the savings.

The function of a DOE loan guarantee, however, is to enable the borrower to <u>gain access</u> the financial markets, not simply to reduce borrowing costs. The government has decided that public policy justifies using tax revenues to support new energy technologies and that the development of those technologies should not be left to private financial markets. Thus it is inappropriate for the government to apply private-market standards to the structure of these loan guarantees.

6. <u>Other Governmental Assistance</u>

The government provides certain benefits to new energy technologies in addition to the loan guarantee program. For example, Section 211(o)(4) of the Clean Air Act, as amended by the Act, provides that one gallon of cellulosic biomass ethanol shall be considered the equivalent of 2.5 gallons of renewable fuel in meeting the applicable volume requirements of subsection (o)(2) of that Section (commonly referred to as the renewable fuel standard), and Section 168(l)(1) of the Internal Revenue Code provides a special 50% depreciation bonus for cellulosic biomass ethanol plant property. These benefits have been provided to the cellulosic biomass ethanol industry as a whole and not targeted to any specific project. In its evaluation of Applications, DOE's consideration of proposed § 609.4(c)(2)(i) should not disadvantage projects benefiting from these and similar provisions.

C. Other Substantive Comments

1. § 609.2, Definition of "Credit Subsidy Cost"

In clause (2) it should be made clear that "recoveries" includes the proceeds of the sale of any collateral after default and foreclosure. We suggest that this clause be amended to read as follows:

> (2) Payments to the Government including origination and other fees, penalties, and recoveries (including, among other things, the net proceeds of the sale of any collateral and other recoveries after default and foreclosure or surrender of assets to DOE); including the effects of changes in loan or debt terms resulting from the exercise by the Borrower, Eligible Lender or other Holder of an option included in the Loan Guarantee Agreement Fees paid to DOE pursuant to Section 1702(h) to cover the applicable administrative expenses for the loan guarantee are excluded from the calculation.

2. § 609.6, Material Required in the Application

A number of items are proposed to be required in the Application that are more properly deferred to the Term Sheet or Loan Guarantee Agreement.

a. In subsection (b)(8) the proposed rule calls for a detailed description of a number of items relating to the EPC contract. At the Application stage, when there is little certainty that the project will be financed, it can be difficult, and will be costly, to get contractors to negotiate such provisions as performance guarantees and liquidated damages provisions. We recommend that in the Application such descriptions should be "preliminary" rather than "detailed," and that the detailed descriptions be called for at the Term Sheet stage, when there is greater certainty that the project will be financed.

b. In subsection (b)(11) the proposed rule calls for a detailed description of the decommissioning, deconstruction and disposal plan and associated costs. While it is customary for nuclear facilities to make detailed long-range provisions for decommissioning, most other types of facilities do not have the same sensitivity, and many large facilities can last for many years, so

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decommissioning and disposal do not require the same level of attention before construction. For non-nuclear facilities, this item should not be required at the Application stage.

c. In subsection (b)(14) the proposed rule calls for copies of all material agreements to be submitted as part of the Application. We suggest that this be amended to permit detailed outlines or term sheets for such agreements at the Application stage. A detailed outline or term sheet can provide DOE with the substantive information it requires in order to evaluate a project. But it is not a good use of either the government's or the Applicant's time, energy and funds to turn detailed outlines or term sheets into full agreements at this stage. And some counterparties are themselves unwilling to incur such expenses at the Application stage, before they have greater certainty that a project will in fact be financed. Thus we suggest that fully drafted agreements not be required until the final Loan Agreement and that this subsection be amended to read as follows:

> "(14) A copy of all material agreements that have been entered into ~~whether entered into or~~ and detailed outlines or term sheets of material proposed agreements relevant to the investment, design, engineering, financing, construction, startup, commissioning, shakedown, operations and maintenance of the project;"

d. In subsection (b)(15) the proposed rule calls for a copy of the financial closing checklist for the equity and debt. This is not typically required before the drafting of the Loan Agreement. The Term Sheet would typically include closing conditions, but a closing checklist at the Application stage—many months before a closing—is premature.

e. In subsection (b)(18) the proposed rule calls for a copy of "all legal opinions" related to the project. In commercial financings it is not customary for legal opinions to be fully drafted when financing proposals are made, and it is not a good use time, energy or money for the Applicant to draft, or the government to review, detailed opinions at this stage. Thus we suggest that legal opinions be described at the Application stage and fully drafted in preparation for the financial closing, with the following specific language suggestion:

§ 609.6(b)(18) should be amended to read as follows:

> "(18) A copy of all ~~legal opinions, and other~~ material reports, analyses and reviews related to the project, and a description of the matters to be addressed in the legal opinions to be delivered at the closing;"

f. Regarding subsection (b)(21), we have noted above our question about the utility of a credit rating. We recommend that a credit rating not be required at any stage and that this subsection be deleted.

g. In subsection (b)(24) the proposed rule calls for, among other things, an appraisal of real property assets. For the projects being considered for loan guarantees, most of the assets will be new personal property, not real property. And the real property consisting of structures will be new construction. For new equipment and structures, the cost of such assets will be the best guide to value. What remains is land, and the value of land in an energy project is a relatively small part of the total Project Cost. Thus we recommend that this appraisal be deferred until the closing under the Loan Guarantee Agreement and that the Applicant not be required to incur this expense at the Application stage, when there is no certainty of a financing.

3. <u>§ 609.9, Closing On the Loan Guarantee Agreement.</u>

a. Subsection (c)(1) has a closing condition that "DOE must have received authority in an appropriations act for the loan guarantee." We assume that appropriations are required for the loan guarantee program and not specifically for each loan guarantee. If so, this condition can be easily satisfied if DOE does not solicit Applications without such authority, and DOE will, no doubt, give assurance of that in each such solicitation. If our assumption is incorrect, then the appropriation should be obtained at a much earlier stage. Otherwise the Applicant will have expended considerable money, time and energy on the false promise of a loan guarantee.

b. Subsection (d)(4) requires, as a closing condition, that "[t]he Department of the Treasury has been consulted on the terms and conditions of the Loan Guarantee Agreement." Such consultation should occur before the Department enters into a Conditional Commitment, in order to avoid the risk and expense of changing the terms of the transaction at the last minute.

4. <u>§ 609.10, Loan Guarantee Agreement.</u>

a. In § 609.10(d)(e), as discussed above, we recommend that "100%" be substituted for "90%".

b. As discussed above, we recommend that § 609.10(b)(4) be deleted.

c. Regarding § 609.10(b)(13), please see the discussion on pages 5-7 above.

d. In subsection (e), the relationship between a guaranteed loan and a non-guaranteed loan is not clear. This subsection appears to provide that DOE may defer payment of interest and principal on the Guaranteed Obligation, with interest continuing to accrue. But "Guaranteed Obligation" includes a non-guaranteed portion, and DOE has no obligation to repay the non-guaranteed portion. If DOE chooses to defer payment of principal or interest on an obligation in default, that should not automatically require the non-guaranteed portion of the obligation also to defer either principal or interest.

5. Eligible Lenders, Holders and Servicers

The references to "Eligible Lender," "Holder" and "other servicer" are somewhat confusing, primarily because "Eligible Lender" is defined in terms of qualifications but used as though it were defined as a role.

We infer that the intention is to have non-governmental parties act as the lead debt party (prior to closing) and the servicer of the debt (after closing). In many cases this party would be a commercial bank or institutional investor who would also be a Holder and would act as both the lead debt party and the servicer. But those roles need not be played by the same party. For example, an investment bank may act as the lead debt party in structuring a guaranteed bond issue, but the servicer of that obligation might be a trustee under the bond indenture.

If this inference is correct, we suggest that the following be clarified:

(A) There must be a lead debt party and a servicer for each Guaranteed Obligation, but they need not be the same party.

(B) Neither the lead debt party nor the servicer is required to be a Holder.

(C) The Holder of a Guaranteed Obligation need not be an Eligible Lender or have the qualifications described in § 609.11(a)(5)-(6) (substantive experience with non-recourse energy financings). If each Holder were required to be an Eligible Lender, it would inhibit the secondary sale of Guaranteed Obligations.

(D) The lead debt party and servicer of the Guaranteed Obligation should each meet the requirements § 609.11(a)(1)-(4).

(E) The lead debt party should meet the requirements of § 609.11(a)(5)-(6) (substantive experience with non-recourse energy financings).

(F) The servicer need not meet the requirements of § 609.11(a)(5)-(6), which related primarily to structuring transactions rather than to administering them.

If the servicer is, for example, a trustee, it should not be expected to have such experience but would be expected to engage consultants and advisors (e.g., an independent engineer) to provide the necessary substantive advice.

We recommend the following specific changes to accomplish this:

a. Create two new definitions:

   i. *"Lead Debt Party* means an Eligible Lender who acts as the representative of prospective Holders in negotiating the terms of a Guaranteed Obligation. A Lead Debt Party must have, or have access to, experience in originating and servicing loans for commercial projects similar in size and scope to the project under consideration and have experience as a debt provider or underwriter in other energy-related projects."[4]

   ii. "*Servicer* means an Eligible Lender who, after a Guaranteed Obligation has been issued, represents Holders in dealing with the Borrower and the Department and performs the functions typical of a debt servicer, as set forth in the indenture or other debt or loan agreement.

b. In clause (2) of the definition of "Credit Subsidy Cost" in § 609.2, change ", Eligible Lender or other Holders" to "or Holders".

c. Amend the definition of "Loan Agreement" in § 609.2 to read as follows:

"Loan Agreement means a written agreement between a Borrower and <u>a Lead Debt Party, Servicer or one or more Holders</u> ~~an Eligible Lender or other Holder~~ containing the terms and conditions under which <u>such debt provider or providers</u> ~~the Eligible Lender or other Holder~~ will make loans to<u>, or purchase debt obligations of,</u> the Borrower to start and complete an Eligible Project."

d. In § 609.6(b)(26), change "Eligible Lender or other Holder" to "prospective Servicer".

e. In § 609.7(d), change "Eligible Lender or other Holder" to "prospective Lead Debt Party or Servicer".

f. In § 609.8(a), change "Eligible Lender or other Holder" to "Lead Debt Party or Servicer".

g. In § 609.8(b), change "Eligible Lender or other Holder" to "Lead Debt Party or Servicer" in three places.

[4] This incorporates language from § 609.11(a)(5)-(6).

h. In § 609.8(c), change "Eligible Lender or other Holder" to "Lead Debt Party or Servicer".

i. In § 609.9(b), change "Eligible Lender or other Holder" to "Lead Debt Party or Servicer" in two places.

j. In § 609.10(d)(14), change "Eligible Lender or other Holder" to "Servicer".

k. In § 609.10(d)(16), change "Eligible Lender, other Holder or servicer" to "Servicer".

l. In § 609.10(d)(19), change "Eligible Lender" to "Servicer".

m. In § 609.10(d)(23), change "Lender" to "Servicer".

n. In § 609.10(e)(3), change "Eligible Lender or other servicer" to "Servicer".

o. In § 609.10(f)(1), change "Eligible Lender or other Holder or other party servicing the Guaranteed Obligations, as applicable," to "Servicer".

p. In § 609.10(f)(2), change "Eligible Lender or other Holder or other party servicing the Guaranteed Obligations, as applicable," to "Servicer".

q. Amend § 609.10(g)(1) to read as follows:

"(1) Each Holder must provide prompt written notification to the Servicer of any pledge or other use of a Guaranteed Obligation as security, including but not limited to any derivatives transaction. The Servicer ~~Eligible Lender~~ must promptly forward a copy of any such ~~provide written~~ notification to DOE and provide prompt written notification to DOE of ~~prior to~~ any assignment or transfer of any portion of a Guaranteed Obligation~~, or any pledge or other use of a Guaranteed Obligation as security, including but not limited to any derivatives transaction~~."

r. Amend § 609.10(g)(2) to read as follows:

> (2) ~~An Eligible Lender or other~~ A Holder may assign or transfer a Guaranteed Obligation covered under the Loan Guarantee Agreement. ~~to another Eligible Lender that meets the requirements of § 609.11 of this part.~~ The Servicer may be replaced by agreement of the Borrower and DOE, as long as the new Servicer is an Eligible Lender, otherwise meets the requirements of these regulations, and agrees ~~. Such Eligible Lender to which a Guaranteed Obligation is assigned or transferred, is required~~ to fulfill all servicing, requirements monitoring, and reporting contained in the Loan Guarantee Agreement and these regulations. ~~if the transferring Eligible Lender was forming these functions. Any assignment or transfer, however, of the servicing, monitoring, and reporting functions must be approved by DOE.~~

s. In § 609.11(a), delete clauses (5) and (6). We propose that they be incorporated in the definition of "Lead Debt Party."

t. In § 609.11(c), change "Eligible Lender or other servicer" to "Servicer".

u. In § 609.15(a), change "Eligible Lender or other Holder, or nominee or trustee empowered to act for the Eligible Lender or other Holder (referred to in this section collectively as 'Holder')" to "Servicer".

v. In § 609.15(h), change "Eligible Lender or other Holder, or other servicer, as appropriate," to "Servicer".

w. In § 609.15(i), change "Eligible Lender or other Holder or other servicer" to "Servicer".

x. In § 609.16(a)(1), change "Eligible Lender or other Holder or other servicer" to "Servicer".

y. In § 609.17(a)(1), change "Eligible Lender or other Holder or other party servicing the Guaranteed Obligations, as applicable," to "Servicer".

z. In § 609.17(a)(2), change "Eligible Lender or other Holder or other party servicing the Guaranteed Obligations, as applicable," to "Servicer".

6. § 609.15, Default, Demand, Payment and Collateral Liquidation

Subsection (g) states that "the Secretary shall be subrogated to the rights of the Holders and shall have superior rights in and to the property acquired from the Holders. The

Holder shall transfer and assign to the Secretary all rights held by the Holder of the Guaranteed Obligations." Since "Guaranteed Obligations" includes the non-guaranteed portion as well as the guaranteed portion, this subsection should be amended. The Secretary is entitled to be subrogated only to the extent that the DOE has paid the obligation to the Holder. To the extent not paid, the Holder would, of course, retain all its rights to the obligation and the collateral.

D. Technical Comments

1. § 609.2. The definition of "Applicant" is limited to someone who submits an Application to DOE. This definition should be expanded to apply to persons, etc. who submit Pre-Applications. This appears to be intended by § 609.4, for example, which refers to Pre-Applications being submitted by Applicants.

2. § 609.4(l) is inconsistent with the statement on page 18 (Section II.E of the Supplementary Information) that "Pre-Applicants that are invited to submit Applications but decline to do so will . . . not be charged a fee." We suggest that this provision be deleted. DOE can simply not accept Applications that are not accompanied by the First Fee.

3. § 609.7(a)(4): Insert "acquiring" as follows: "The entity or person issuing the loan or <u>acquiring</u> other debt obligations . . ."

4. § 609.7(b)(3): "To the extent that" at the beginning of the subsection should be "To what extent" or "The extent to which" in order to be parallel to subsections (2) and (4).

5. § 609.9(g) says that changes in the terms and conditions of the financing arrangements "will" affect the credit subsidy cost. We suggest that "will" be changed to "may", because there may be changes that do not affect the credit subsidy cost.

6. § 609.10(d)(23): "Lender" is not a defined term. (We have proposed above suggested language changes that would not require the use of "Lender.")

7. § 609.11(a)(4): "is in good standing" should be "<u>be</u> in good standing".

8. § 609.12(c)(6): The phrase "as determined by DOE" should be amended to read "as <u>reasonably</u> determined by DOE".

9. § 609.12(c)(8): The use of "before" in this provision is unclear. Typically startup, commissioning and shakedown will be finished at about the same time the facility is placed in service.

10. § 609.13(a)(1): "is not in default" should be "is not <u>otherwise</u> in default".

11. § 609.17(a)(2): Please insert "on reasonable notice" as follows: "<u>After reasonable notice has been given, such</u> ~~Such~~ inspection may be made during regular office hours of the Borrower, Eligible Lender or other Holder, or other party servicing the Eligible Project and the Guaranteed Obligations, as applicable, or at any other time mutually convenient."

12. § 609.17(b): "which the Secretary determines to be unnecessary or excessive" should be "which the Secretary <u>reasonably</u> determines to be unnecessary or excessive".

13. § 609.18: The last sentence says that any deviation that was not captured in the Credit Subsidy Cost "will" require either additional fees or discretionary appropriations. The "will" in this sentence should be changed to "may," because there may be deviations that do not change the Credit Subsidy Cost.

14. Typographical Errors

   a. § 609.2, Definitions:

      i. The definition of "Credit Subsidy Cost" is missing a period after "Loan Guarantee Agreement" in clause (2).

      ii. In the definition of "Term Sheet," in the first instance of "loan Guarantee Agreement," the word Loan should be capitalized.

   b. In § 609.6(b)(24) and (25), "Guarantee Obligations" should be "Guarantee<u>d</u> Obligation".

   c. In § 609.7(a)(2), "anthropogenics" should be "anthropogenic".

   d. In § 609.7(b)(2), "commercial viable project" should be "commerciall<u>y</u> viable project".

   e. In the next-to-last sentence of § 609.10(g)(2), "forming" should be "<u>per</u>forming".